

REMARKS

Amendment summary

Claims 1-2, 4, and 6 are canceled.

Claim 5 is amended to place it into independent form. In addition, claim 5 is amended to recite a method for forming an interlayer insulating film of a semiconductor element and that the interlayer insulating film has a dielectric constant of not higher than 2.5. Support for this amendment may be found, e.g., on page 1, lines 10-11 and page 23, line 18 of the present specification.

Claims 7-9 are added. Claims 7 and 9 are supported, e.g., by page 9, lines 26-28 of the present specification and by previous claims 2 and 4. Claim 8 is supported, e.g., by page 9, line 19 of the present specification.

Upon entry of this Amendment, claims 5 and 7-9 will be pending.

No new matter is added by this Amendment, and Applicant respectfully submits that entry of this Amendment is proper.

Status of the claims

Claims 1-2 and 5-6 are rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Yamada et al. (U.S. Patent No. 6,645,881) (hereinafter “Yamada”). Claims 1-2 and 5-6 are also rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yamada. Claim 4 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yamada in view of Zama (U.S. Patent Application Publication No. 2004/0034107).

Response to rejection of claims 1-2 and 5-6 under 35 U.S.C. §§ 102 and 103 based on Yamada

Applicant respectfully submits that Yamada does not anticipate or render obvious the presently claimed invention because (1) Yamada does not teach or suggest a method for forming an interlayer insulating film of a semiconductor element; and (2) Yamada does not teach or suggest that the dielectric constant of the interlayer insulating film is not higher than 2.5.

The present claims recite a method for forming an interlayer insulating film of a semiconductor element comprising the steps of applying a coating composition for forming an interlayer insulating film of a semiconductor element onto a base material and then drying the coated layer. The interlayer insulating film has a dielectric constant of not higher than 2.5, and the coating composition comprises components (A), (B), and (C), as described in the claims.

The presently claimed invention provides a method of forming an interlayer insulating film of a semiconductor element that has (a) a dielectric constant of not higher than 2.5; (b) a uniform thickness; (c) no cracks; and (d) excellent heat resistance and adhesive properties.

Applicant respectfully submits that Yamada does not disclose or suggest the presently claimed invention because Yamada discloses a coating solution for silica-based films. Yamada does not disclose or suggest the presently claimed method of forming an interlayer insulating film of a semiconductor element in which the interlayer insulating film has a dielectric constant of not higher than 2.5.

Accordingly, Applicants respectfully submit that Yamada does not teach or suggest the presently claimed invention. Applicants therefore respectfully request the reconsideration and withdrawal of these §§ 102 and 103 rejections.

Response to rejection of claim 4 under 35 U.S.C. § 103(a) based on Yamada in view of Zama

Applicant respectfully submits that Zama does not cure the deficiencies found in Yamada, discussed above, and therefore the presently claimed invention is not rendered obvious by the combined teachings of Yamada and Zama.

Zama does not disclose the presently recited method for forming an interlayer insulating film of a semiconductor element in which the interlayer insulating film has a dielectric constant of not higher than 2.5. Zama discloses a hollow polymer particle which may be added to a semiconductor sealing material or the like in order to utilize the low dielectric property of air. Zama also discloses the use of the hollow polymer particle in a paper coating composition to give well-balanced printing properties, such as whiteness, opacity, gloss, coating strength, and printing gloss. See Paragraph Nos. [0038] and [0039] of Zama.

In addition, Applicant respectfully submits that because the benefits of the presently claimed invention are not suggested in the cited prior art, the present rejection was arrived at through improper hindsight reasoning. As mentioned above, the presently claimed invention provides a method of forming an interlayer insulating film of a semiconductor element that has (a) a dielectric constant of not higher than 2.5; (b) a uniform thickness; (c) no cracks; and (d) excellent heat resistance and adhesive properties. Such properties are not mentioned in Yamada or Zawa in conjunction with embodiments that correspond to the presently claimed invention. As a result, Applicant respectfully submits that the present rejection was arrived at through improper hindsight reasoning.

In view of the above, Applicant respectfully submits that the combined teachings of Yamada and Zama do not render obvious the presently claimed invention. Therefore, Applicant respectfully requests the withdrawal of this § 103 rejection.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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